

U.S. Patent Application Serial No. 10/082,089
Amendment filed April 11, 2005
Reply to OA dated January 12, 2005

AMENDMENTS TO THE CLAIMS:

Please cancel claim 13 without prejudice or disclaimer and amend claims 8 and 18 as follows. This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-7 (Canceled).

Claim 8 (Currently amended): A method of producing spherical dry color toner for electrostatic image development, in which the toner comprises a polyester resin having a carboxyl group, ~~a releasant dispersed finely in the polyester resin~~ and an organic pigment dispersed finely in the polyester resin,

the method comprising dissolving the polyester resin in an organic solvent, adding the colorant ~~and the releasant~~, dispersing them to prepare a resin solution,

mixing the resin solution containing the polyester resin, ~~the releasant~~ and an organic pigment with an aqueous medium in the presence of a base and a phase inversion accelerator, to prepare a colored particle suspension containing the resin solution, as color particles, emulsified in the aqueous medium,

separating the colored particles from the colored particle suspension, and drying the colored particles,

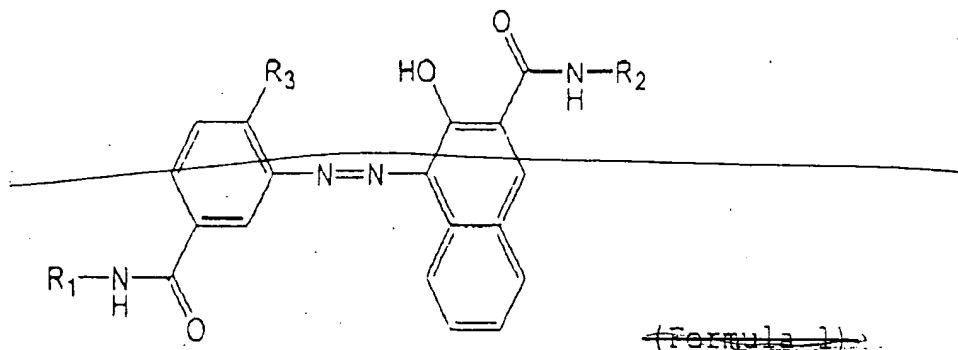
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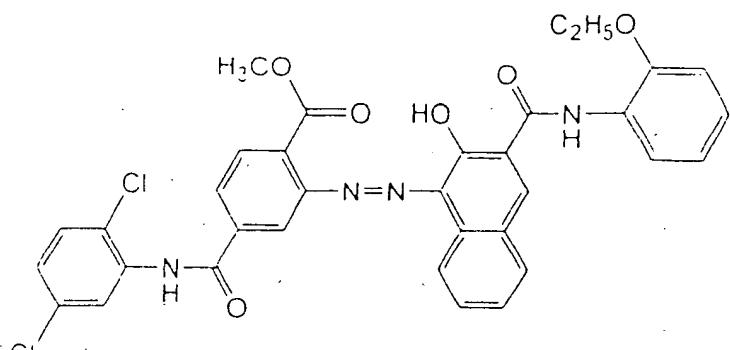
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wherein said organic pigment is an organic pigment represented by Formula 1 + Formula 8

(C.I. Pigment Red 188):



Formula 1



(Formula 8)

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~~wherein R₁ represents a non-substituted phenyl group or a phenyl group having a substituent, R₂ represents hydrogen, a non-substituted phenyl group or a phenyl group having a substituent, and R₃ represents an alkoxy group or an ester group,~~

 said phase inversion accelerator is selected from methanol, ethanol, isopropanol, n-propanol, isobutanol, n-butanol, t-butanol, sec-butanol, ethylene glycol monomethyl ether, propylene glycol monomethyl ether, ethylene glycol monomethyl ether, barium chloride, calcium chloride, cuprous chloride, cupric chloride, ferrous chloride, and ferric chloride, and

~~said releasant is a carnauba wax or a tetrabehenate ester of pentaerythritol.~~

Claims 9-17 (Canceled).

Claim 18 (Currently amended): A method of producing spherical dry color toner for electrostatic image development according to claim 13, wherein the organic pigment represented by ~~Formula 1 is formula 8~~, in which the toner comprises a polyester resin having a carboxyl group, a releasant dispersed finely in the polyester resin and an organic pigment dispersed finely in the polyester resin,

the method comprising dissolving the polyester resin in an organic solvent, adding the colorant and the releasant, dispersing them to prepare a resin solution,
mixing the solution containing the polyester resin, the releasant and an organic pigment with

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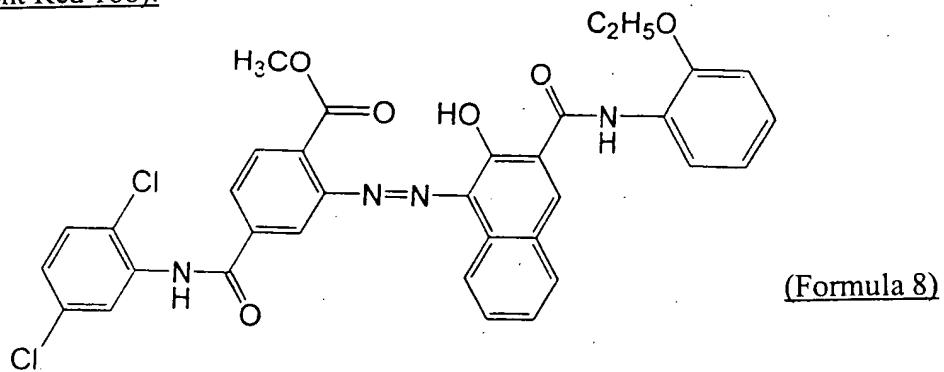
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an aqueous medium in the presence of a base and a phase inversion accelerator, to prepare a colored particle suspension containing the resin solution, as color particles, emulsified in the aqueous medium.

separating the colored particles from the colored particle suspension, and drying the colored particles.

wherein said organic pigment is an organic pigment represented by the Formula 8 (C. I. Pigment Red 188):



said phase inversion accelerator is selected from methanol, ethanol, isopropanol, n-propanol, isobutanol, n-butanol, t-butanol, sec-butanol, ethylene glycol monomethyl ether, barium chloride, calcium chloride, cuprous chloride, cupric chloride, ferrous chloride, and ferric chloride, and
said releasant is a carnauba wax or a tetrabehenate ester of pentarythritol.

Claim 19 (Previously presented): A method of producing spherical dry color toner for electrostatic image development according to claim 8, wherein the mixing the resin solution with

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an aqueous medium in the presence of a base and a phase inversion accelerator is a process of adding dropwise water while stirring at a circumferential speed within a range of 0.2-5 m/second.

Claim 20 (Previously presented): A method of producing spherical dry color toner for electrostatic image development according to claim 8, wherein mixing the resin solution with an aqueous medium in the presence of a base and a phase inversion accelerator is a process of adding dropwise water while stirring employing a stirrer, an anchor blade, a turbine blade, a faudler blade, a full-zone blade, a max blend blade, or a semicircular blade.